

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-10. (cancelled)

11. (previously presented) An information retrieving apparatus for retrieving target information from a plurality of candidates, comprising:

storage means for storing the plurality of candidates in a hierarchical structure including m hierarchies (m being a natural number not less than 2);

output means for outputting a message which requests a user to input a reply;

input means for a user to input the reply; and

searching means for searching candidates as to a plurality of hierarchies in the hierarchical structure to determine a corresponding candidate to the reply,

wherein the next message which requests the user to input the next reply is further output from the output means based on the corresponding candidate until the corresponding candidate becomes the target information.

12. (previously presented) An information retrieving apparatus according to claim 11, wherein the hierarchical structure is arranged such that each candidate belonging to

( $n+1$ )-th hierarchy ( $n$  being a natural number and  $n < m-1$ ) is associated with one of the plurality of candidates belonging to  $n$ -th hierarchy.

13. (previously presented) An information retrieving apparatus according to claim 11, wherein the output means outputs the next question relating to the ( $p+1$ )-th hierarchy if the corresponding candidate belongs to the  $p$ -th hierarchy ( $p$  being a natural number and  $p < m-1$ ), while the output means outputs the next message relating to the ( $p+q+1$ )-th hierarchy if the corresponding candidate belongs to the ( $p+q$ )-th hierarchy ( $q$  being a natural number and  $(p+q) < m-1$ ).

14. (previously presented) An information retrieving apparatus according to claim 13, the searching means further comprising means for expanding candidates searched;

wherein in a case where the corresponding candidates is not found in the  $p$ -th hierarchy, the searching means expand the candidates searched so that candidates in the ( $p+q$ )-th hierarchy are searched.

15. (previously presented) An information retrieving apparatus according to claim 14, wherein in a case where the corresponding candidates is found in the  $p$ -th hierarchy, the searching means does not expand the candidates searched so that candidates in the ( $p+q$ )-th hierarchy are not searched.

16. (previously presented) An information retrieving apparatus according to claim 11, wherein the message relates to

r-th hierarchy (r being a natural number and  $r < m-1$ ), and the output means outputs the next message relating to (r+1)-th hierarchy if the input information is not inputted for a predetermined time.

17. (previously presented) An information retrieving apparatus according to claim 11, wherein the r-th hierarchy (r being a natural number and  $r < m-1$ ) comprises a plurality of groups each including candidates, and the message relates to one of the groups in the r-th hierarchy, and wherein if the input information is not inputted for a predetermined time, the output means outputs the next message relating to other one of the groups.

18. (previously presented) An information retrieving apparatus according to claim 17, wherein the reply is in a form of voice, and the input means comprises a voice recognition means for recognizing the reply.

19. (previously presented) A method of retrieving target information from a plurality of candidates that compose a hierarchical structure including m hierarchies (m being a natural number not less than 2), the method comprising the steps of:

outputting a message which requests a user to input a reply;

receiving the reply from the user;

searching candidates as to a plurality of hierarchies in the hierarchical structure to determine a corresponding

candidate to the reply; and

outputting the next message, which further requests the user to input the next reply, based on the corresponding candidate until the corresponding candidate becomes the target information.

20. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 19, wherein the hierarchical structure is arranged such that each candidate belonging to  $(n+1)$ -th hierarchy ( $n$  being a natural number and  $n < m-1$ ) is associated with one of the plurality of candidates belonging to  $n$ -th hierarchy.

21. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 19, wherein the step of outputting outputs the next question relating to the  $(p+1)$ -th hierarchy if the corresponding candidate belongs to the  $p$ -th hierarchy ( $p$  being a natural number and  $p < m-1$ ), while the step of outputting outputs the next message relating to the  $(p+q+1)$ -th hierarchy if the corresponding candidate belongs to the  $(p+q)$ -th hierarchy ( $q$  being a natural number and  $(p+q) < m-1$ ).

22. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 21, the searching means further comprising means for expanding candidates searched;

wherein in a case where the corresponding candidates is not found in the  $p$ -th hierarchy, the step of searching expand the candidates searched so that candidates in the  $(p+q)$ -th hierarchy are searched.

23. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 22, wherein in a case where the corresponding candidates is found in the  $p$ -th hierarchy, the step of searching does not expand the candidates searched so that candidates in the  $(p+q)$ -th hierarchy are not searched.

24. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 19, wherein the message relates to  $r$ -th hierarchy ( $r$  being a natural number and  $r < m-1$ ), and the step of outputting outputs the next message relating to  $(r+1)$ -th hierarchy if the input information is not inputted for a predetermined time.

25. (previously presented) A method of retrieving target information from a plurality of candidates according to claim 19, wherein the  $r$ -th hierarchy ( $r$  being a natural number and  $r < m-1$ ) comprises a plurality of groups each including candidates, and the message relates to one of the groups in the  $r$ -th hierarchy, and wherein if the input information is not inputted for a predetermined time, the step of outputting outputs the next message relating to other one of the groups.

26. (previously presented) A storage medium carrying, in a computer-readable manner, an information retrieving program for retrieving target information from a plurality of candidates that compose a hierarchical structure including  $m$  hierarchies ( $m$  being a natural number not less than 2), said program controls a computer device to function as:

output means for outputting a message which requests a user to input a reply;

input means for a user to input the reply; and

searching means for searching candidates as to a plurality of hierarchies in the hierarchical structure to determine a corresponding candidate to the reply,

wherein the next message which requests the user to input the next reply is further output from the output means based on the corresponding candidate until the corresponding candidate becomes the target information.

27. (previously presented) A storage medium according to claim 26, wherein the hierarchical structure is arranged such that each candidate belonging to  $(n+1)$ -th hierarchy ( $n$  being a natural number and  $n < m-1$ ) is associated with one of the plurality of candidates belonging to  $n$ -th hierarchy.

28. (previously presented) A storage medium according to claim 26, wherein the output means outputs the next question relating to the  $(p+1)$ -th hierarchy if the corresponding candidate belongs to the  $p$ -th hierarchy ( $p$  being a natural number and  $p < m-$

1), while the output means outputs the next message relating to the  $(p+q+1)$ -th hierarchy if the corresponding candidate belongs to the  $(p+q)$ -th hierarchy ( $q$  being a natural number and  $(p+q) < m-1$ ).

29. (previously presented) A storage medium according to claim 28, the searching means further comprising means for expanding candidates searched;

wherein in a case where the corresponding candidates is not found in the  $p$ -th hierarchy, the searching means expand the candidates searched so that candidates in the  $(p+q)$ -th hierarchy are searched.

30. (previously presented) A storage medium according to claim 29, wherein in a case where the corresponding candidates is found in the  $p$ -th hierarchy, the searching means does not expand the candidates searched so that candidates in the  $(p+q)$ -th hierarchy are not searched.

31. (previously presented) A storage medium according to claim 26, wherein the message relates to  $r$ -th hierarchy ( $r$  being a natural number and  $r < m-1$ ), and the output means outputs the next message relating to  $(r+1)$ -th hierarchy if the input information is not inputted for a predetermined time.

32. (previously presented) A storage medium according to claim 26, wherein the  $r$ -th hierarchy ( $r$  being a natural number and  $r < m-1$ ) comprises a plurality of groups each including candidates, and the message relates to one of the groups in the

r-th hierarchy, and wherein if the input information is not inputted for a predetermined time, the output means outputs the next message relating to other one of the groups.

33. (previously presented) The storage medium according to claim 26, wherein the program controls the computer device to cause the input means to recognize the reply in a form of voice.

34. (previously presented) A computer data signal embodied in a carrier wave and representing instructions executed by a computer system to retrieve target information from a plurality of candidates that compose a hierarchical structure including m hierarchies (m being a natural number not less than 2), comprising the instructions for:

outputting a message which requests a user to input a reply;

receiving the reply from the user;

searching candidates as to a plurality of hierarchies in the hierarchical structure to determine a corresponding candidate to the reply; and

outputting the next message, which further requests the user to input the next reply, based on the corresponding candidate until the corresponding candidate becomes the target information.

35. (new) The information retrieving apparatus according to claim 1, wherein the apparatus further comprises information providing means for providing information to the user by performing data processing based on the target information.



36. (new) The method according to claim 19, wherein the method further comprises the step of providing information to the user by performing data processing based on the target information.

37. (new) The storage medium according to claim 26, wherein the program controls a computer device to further function as information providing means for providing information to the user by performing data processing based on the target information.